



APPENDIX A
"Clean" Version of Each Paragraph/Section/Claim
37 C.F.R. § 1.121(b)(ii) and (c)(i)

SPECIFICATION:

Replacement for the paragraph beginning at page 5, line 8:

B1
In subsequent logons to the system, the present invention allows customers to re-identify themselves to see a forgotten ID, and to re-verify themselves so they can recreate a password if a password is forgotten. The present invention allows the customer to create answers to challenge questions that only the user should know the answer to. For example, a challenge question could be, "what model was your first car?". The answers to the challenge questions are stored in the system for future use if the user forgets his password. If the situation occurs that the user does forget his password, he is presented with the challenge questions to which he previously provided the answers. If the user successfully answers the challenge questions, he is allowed access to the system (and is allowed to change his password).

Replacement for the paragraph beginning at page 6, line 1:

B2
The present invention is not limited to providing access to personal accounts and is equally applicable to business accounts. Business customers can use the system for online enrollment, fulfillment and ownership verification. This includes customers who want to see both personal and business accounts under one ID and password. The business owner may be a sole proprietor (using a social security number), a business owner or partner (using a tax identification number (TIN)), or a multiple business owner (multiple TINs). Furthermore, the system allows a tiered authority structure where an owner of an account can set up and authorize access to the same or lesser levels of authority to non-owners of the accounts (e.g., spouses or employees). This allows set up and monitoring of sub-IDs for consumers as well as businesses.

Replacement for the paragraph beginning at page 6, line 17:

B3
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The present invention provides ease of use by the customer since the customer does not need to duplicate work such as inputting his or her social security number, account number, and other personal or account information a number of different times to either sign up for access or

B3
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to logon to see their accounts. The ability for the customer to use "self-service" sign up and logon failure procedures eliminates or minimizes customer and back office support for fulfillment (e.g., issuing IDs, passwords, and reissued passwords). The single sign on ID and password that allows access to all of the customer's accounts provides speed of fulfillment, ease of use and reduced customer support for issued or forgotten IDs and passwords. The ability for customers to see all of their accounts with one logon eases the customer experience and enhances customer retention, as well as enhancing cross-sell and up-sell efforts.

Replacement for the paragraph beginning at page 7, line 19:

B4

System 100 illustrates the system of the present invention that allows customers 110 to use a single sign on procedure to obtain access to a plurality of their accounts residing on the systems 192-196 for different lines of business in the institution. Customers 110 use their workstations 110 to connect to system 100 through a communication network 115. In a preferred embodiment, the network 115 is the public Internet, but can be any other communication connection such as a direct dial up line or a third party value add network. Customer workstations 110 are comprised of any platform capable of running an Internet web browser or similar graphical user interface software. Examples of suitable web browsers include Microsoft's Internet Explorer™ and Netscape's Communicator™. The platform for user workstations 110 can vary depending on the needs of its particular user and includes a desktop, laptop or handheld personal computer, personal digital assistant, web enabled cellular phone, web enabled television, or even a workstation coupled to a mainframe computer.

Replacement for the paragraph beginning at page 8, line 9:

B5
cm, x

In the preferred embodiment, customer workstations 110 communicate with system 100 using the Transmission Control Protocol/Internet Protocol (TCP/IP) upon which particular subsets of that protocol can be used to facilitate communications. Examples include the Hypertext Transfer Protocol (HTTP), data carrying Hypertext Mark-Up Language (HTML) web pages, Java and Active-X applets and File Transfer Protocol (FTP). Data connections between customer workstations 110 and data communication network 115 can be any known arrangement for accessing a data communication network, such as dial-up Serial Line Interface

B5
Emd
Protocol/Point-to-Point Protocol (SLIP/PPP), Integrated Services Digital Network (ISDN), dedicated leased-line service, broadband (cable) access, Digital Subscriber Line (DSL), Asynchronous Transfer Mode (ATM), Frame Relay or other known access techniques. Web servers 120 are coupled to data communication network 115 in a similar fashion. However, it is preferred that the link between the web servers 120 and data communication network 115 be arranged such that access to web servers 120 is always available.

Replacement for the paragraph beginning at page 10, line 26:

B6
Figure 2 illustrates an overview of the sign up and log on processes of the present invention. In step 200 a customer is presented with an up-front filter asking them to define themselves as a business, personal, both business and personal, or if they are not a customer. Prior to the customer continuing in the process, a warning is presented to the customer with respect to the dual signature limitation for business customers. Based on the self-selection, the customer is presented with an explanation in regard to the linking of personal and business accounts, the single signer requirement, and the necessity of signing up business accounts first.

Replacement for the paragraph beginning at page 12, line 4:

B7
After creating the User ID and password, the customer is presented with the option to select challenge questions, which as described below, enables them to reset their passwords online, by themselves, in the event the customer forgets the password selected. In step 210, the customer is then presented with an online legal agreement that must be accepted prior to the customer continuing. The online legal agreement contains all of the terms and conditions of the customer's use of system 100. For those customers who were set up via the call center, this legal agreement is presented to them upon logging on for the first time.

Replacement for the paragraph beginning at page 12, line 13:

B8
Em.t
In step 215, the customer is shown all of his/her accounts (including business accounts if applicable) that he/she has with the institution. The account information is presented to the customer based on data contained in the customer's CIF profile. After the accounts have been presented to the customer, the customer is given the option to view these accounts using system

B8
Cm'd. 100. In addition to the accounts the customer can view, the customer is shown all services (e.g., tax, payroll, wire transfer, and electronic billing services) in which the customer is able to participate.

Replacement for the paragraph beginning at page 14, line 21:

B9 Each of the identification screens prompt the user for information sufficient to retrieve the customer's information from the CIF. This information includes the Social Security Number (SSN) for access to personal accounts, the Taxpayer Identification Number (TIN) for access to business accounts, the customer's account number and account type, the user's first and last name and email address. The email address portion of the input screen for identification also has a check box to allow users to opt-in for marketing email messages.

Replacement for the paragraph beginning at page 16, line 12:

B10 In step 310, the user is prompted to Create a user ID, a password and challenge questions. Regardless of whether the user is identified on the CIF, the user is allowed to create an ID and password that are added to the database of system 100. Prospects (users without current accounts) are allowed to establish a user ID and password in order to facilitate Sign Up at a later time or to access non-account features, such as saving data to a calculator or application or personalizing a financial utility page. The user is created in the system by adding the ID, password and email address to the database. If the user has been identified as a customer with current accounts, the customer's CIF number is also stored in the database with the ID and password.

Replacement for the paragraph beginning at page 16, line 23:

B11
Cm't At this point in the sign up process, the user is also prompted to select and answer challenge questions. These challenge questions replace the prior art method of re-verifying using account information. The user selects one question from each of three drop down lists and completes the answers. Users that have passed the CIF match (i.e. customers) have the option to opt-out of challenges. If they choose to do so, they will not be able to re-verify online and create a new password. They would have go through the customer service center of the institution and

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a new password is mailed to them. As previously described, the challenge questions are personal in nature, of a type that only the user would be able to answer them (e.g., what was your first grade teacher's name).

Replacement for the paragraph beginning at page 17, line 16:

B12

In step 315, the user is presented with the legal agreement governing the user's access to system 100. All users creating a user ID and password have to accept the legal agreement. This is equally true for prospects and customers that have both passed or failed the CIF match. Since these users will have other functionality at the site, they all need to accept the legal agreement. The user is presented with the legal agreement and has the option to select "I Agree" or "I Disagree" or "Print". If the user rejects the disclosure, she is notified that she cannot continued with the sign up process and is presented with the option to view it again. If the user accepts the disclosure, the sign up process continues.

Replacement for the paragraph beginning at page 17, line 26:

B13

After the user accepts the legal agreement, there is a decision point before proceeding to the next step. If the customer was coming from a process other than signing up for account access, the user will be prompted to Log On. After successfully logging on, the user is returned to the process that brought him to Sign Up. If the user is signing up for account access, the user will continue with show/hide functionality.

Replacement for the paragraph beginning at page 20, line 2:

B14

Verification according to the present invention is different from the prior art authentication for several reasons. First, some of the prior art verification questions are not applicable to the Internet channel or to the "self-service" methods of the present invention. For example, a question related to a "a recent transaction" cannot be prompted and verified by a system such as system 100 in real time. The verification questions of the present invention relate to access to accounts via the Internet Channel, and are not related to a global name or address change.

Replacement for the paragraph beginning at page 20, line 18:

B15
Of the products the customer has chosen to activate online during the select account process (step 320 of Fig. 3), an account of the "highest" product type on the hierarchy is chosen to verify against. If multiple accounts of this product type have been selected, the system performs the following logic to determine which account to use for product-level verification. If the product type for verification is the same type that the user identified himself with during sign up/identification, the account number chosen during identification is used. If the product type was not used for identification, then the first account returned on the list is used.

Replacement for the paragraph beginning at page 20, line 26:

B16
In step 400 it is determined if the authentication level for the current product/account selected is greater than the current level of verification performed by the user. If it is not, the process proceeds to step 425 in which the user is confirmed for the present level of verification. In a preferred embodiment of the present invention the hierarchy implemented for personal customers opposed to business customers is: Credit Card; Checking/MMA (excluding IRA MMA); Savings/IRA MMA/IRA Savings; CD/IRA CD; Overdraft Line of Credit; Investments; and Mortgage. The customer's SSN is not used for verification of a product since the user has already entered it during the Sign Up/ Identification process. If a higher level of verification is required, the system in step 405 checks to see if there is a complete record for the account in the database of system 100. If there is not a complete record, an error message is generated in step 407

Replacement for the paragraph beginning at page 22, line 11:

B17
The following are some examples of the verification questions required for access to specific accounts. For credit card products, it is required that the user enter the trailing 4 digits for all of the accounts they are selecting to "show". If the user incorrectly enters the trailing digits for the account being used for verification, then, after three attempts, the user fails verification altogether. However, if the user incorrectly enter the trailing 4 digits for an account not being used for verification, then the user just does not have online access to that account. In addition to the account number, the user will be prompted to answer questions related to the

B17
Cmell. following: Mother's Maiden Name; the CVV/C2 number printed on the reverse side of the physical credit card; Date of Birth; and Home Phone Number.

Replacement for the paragraph beginning at page 24, line 3:

B18
The verification of ownership processes for online access for Small Business customers is dependent on whether or not the customer has a deposit product in their profile. As with personal authentication, if a business customer verifies or correctly answers questions for a particular product, they are automatically verified for each of the products below it in the hierarchy. Verification requirements for Small Business customers differs from that for Personal customers. Products available for online access are Checking, MMA, Savings, CD, Credit Card, Revolving credit products and Investments. As a rule, a business customer must either verify ownership against a deposit account or an investment account. In a preferred embodiment, small business customers will not be able to verify against any other accounts. In the preferred embodiment, the verification hierarchy for small businesses is as follows: Checking/MMA; Savings; CD; and Investments.

Replacement for the paragraph beginning at page 24, line 20:

B19
Although described briefly before, the follow generally describes the log on process. When a user logs on, several scenarios exist based on varying ID and password combinations inputted by the user such as valid ID/invalid password, invalid ID/invalid password, etc. Although each of these scenarios are a bit different, it has been learned that if the scenarios are treated differently, the system 100 will reveal information regarding a "hit" on a valid ID, as well as information regarding the security and authentication logic and User ID status within the system. To ensure that system 100 does not leak any such information, all scenarios with regard to invalid ID/PW combinations are treated identical. The customer has the ability to click on a "Having Trouble?" link and be presented with Help options (that is, contact customer support or re-authenticate online options).